

Use Attainability Analysis

for

WBID 0652 Sandy Creek

Submitted by

Missouri Department of Natural Resources Staff

To

Missouri Department of Natural Resources
Water Protection Program

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JUL 12 2005
WATER PROTECTION PROGRAM

Field Data Sheets for Recreational Use Stream Surveys

Data Sheet A - Water Body Identification

| | |
|----------------------------------------|-------------------------------------------------------------|
| Water Body Name (from USGS 7.5' quad): | Sandy Creek |
| 8-digit HUC: | 10280201 |
| Missouri WBID #: | 0652 |
| County: | Putnam |
| Upstream Legal Description: | NW $\frac{1}{4}$, SE $\frac{1}{4}$, Sec. 19, T 66N, R 17W |
| Downstream Legal Description: | NW $\frac{1}{4}$, NE $\frac{1}{4}$, Sec. 28, T 66N, R 17W |
| Upstream Coordinates: | 40.50834 N 92.84810 W FOM: 11.2 |
| Downstream Coordinates: | 40.50437 N 92.82041 W FOM: 18.9 |
| Discharger Facility Name(s): | |
| Discharger Permit Number(s): | |
| Number of Sites Evaluated: | 3 |
| Name of Surveyor and Telephone Number: | Dave Dowdy 660-385-8796 |
| Organization: | SWCP |
| Position: | SS III |

I, the undersigned, hereby affirm to the best of my knowledge, that all information reported on this UAA datasheet is true and accurate.

Signed: A. Marshous Date: 7-7-05



Field Data Sheets for Recreational Use Stream Surveys

Data Sheet B - Site Characterization

(A separate data sheet must be completed for each site)

| | | | |
|-------------------------------------------------|--------------------|-----------------------------------------------------------|--|
| Missouri WBID #: 0652-01 | | Site Location Description: Sandy Creek | |
| Site GPS Coordinates: 9284810 W / 4050834 N | | FOM: 11-2 ft | |
| Date & Time: 7-6-05 @ 9:40a | | Facility Name: | |
| Personnel: DD, AM | | Permit Number: | |
| Current Weather Conditions: Hot, Sunny, 14 mi/h | | Weather Conditions for Past 7 days: Some Rain, Hot, Humid | |
| Photo Ids: Upstream: 0652U1 | Downstream: 0652D1 | Other: | |

Uses Observed*:

| | | | | |
|---------------------------------------|--------------------------------------|---------------------------------------|-------------------------------------------------------|---------------------------------------|
| <input type="checkbox"/> Swimming | <input type="checkbox"/> Skin diving | <input type="checkbox"/> SCUBA diving | <input type="checkbox"/> Tubing | <input type="checkbox"/> Water skiing |
| <input type="checkbox"/> Wind surfing | <input type="checkbox"/> Kayaking | <input type="checkbox"/> Boating | <input type="checkbox"/> Wading | <input type="checkbox"/> Rafting |
| <input type="checkbox"/> Hunting | <input type="checkbox"/> Trapping | <input type="checkbox"/> Fishing | <input checked="" type="checkbox"/> None of the above | <input type="checkbox"/> Other: |

Describe: (include number of individuals recreating, frequency of use, photo-documentation of evidence of recreational uses, etc.)

Surrounding Conditions*: (Mark all that promote or impede recreational uses. Attach photos of evidence or unusual items of interest.)

| | | | | |
|--------------------------------------------|-------------------------------------------|--------------------------------------------------|----------------------------------------|-----------------------------------------|
| <input type="checkbox"/> City/county parks | <input type="checkbox"/> Playgrounds | <input type="checkbox"/> MDC conservation lands | <input type="checkbox"/> Urban areas | <input type="checkbox"/> Campgrounds |
| <input type="checkbox"/> Boating accesses | <input type="checkbox"/> State parks | <input type="checkbox"/> National forests | <input type="checkbox"/> Nature trails | <input type="checkbox"/> Stairs/walkway |
| <input type="checkbox"/> No trespass sign | <input checked="" type="checkbox"/> Fence | <input checked="" type="checkbox"/> Steep slopes | <input type="checkbox"/> Other: | |

Evidence of Human Use* → Calamint Trail

| | | | | |
|--------------------------------------------------|--------------------------------------------|----------------------------------------|--------------------------------------------------------|------------------------------------------|
| <input checked="" type="checkbox"/> Roads Bridge | <input type="checkbox"/> Foot paths/prints | <input type="checkbox"/> Dock/platform | <input checked="" type="checkbox"/> Livestock Watering | <input type="checkbox"/> RV / ATV Tracks |
| <input type="checkbox"/> Rope swings | <input type="checkbox"/> Camping Sites | <input type="checkbox"/> Fire pit/ring | <input type="checkbox"/> NPDES Discharge | <input type="checkbox"/> Fishing Tackle |
| <input type="checkbox"/> Other: | | | | |

Site Locations Map(s): Attach a map of entire segment with assessment sites clearly labeled. Mark any other items that may be of interest. (Include photographs)

*Some of this information is not intended to directly influence a decision on any one particular recreational use analysis but may point to conditions that need further analysis or that effect another use.

Field Data Sheets for Recreational Use Stream Surveys

Data Sheet B - Site Characterization

Page Two - WBID # 0652 ÷ 01

Stream Morphology:

Upstream View Physical Dimensions:

| | | | | |
|------------------------------------------|-----------------------|---------------------------------------------------------------------|-----------------------------------|------------------------------|
| <input type="checkbox"/> Riffle | Width (ft): | Length (ft): | Avg. Depth (ft): | Max. Depth (ft): |
| <input checked="" type="checkbox"/> Run | Width (ft): <u>18</u> | Length (ft): <u>40</u> | Avg. Depth (ft): <u>< 0.25</u> | Max. Depth (ft): <u>0.25</u> |
| <input type="checkbox"/> Pool | Width (ft): | Length (ft): | Avg. Depth (ft): | Max. Depth (ft): |
| <input checked="" type="checkbox"/> Flow | Present? | <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No | Estimated (ft ³ /sec): | |

Downstream View Physical Dimensions:

| | | | | |
|------------------------------------------|-----------------------|---------------------------------------------------------------------|-----------------------------------|------------------------------|
| <input type="checkbox"/> Riffle | Width (ft): | Length (ft): | Avg. Depth (ft): | Max. Depth (ft): |
| <input checked="" type="checkbox"/> Run | Width (ft): <u>20</u> | Length (ft): <u>40</u> | Avg. Depth (ft): <u>< 0.25</u> | Max. Depth (ft): <u>0.25</u> |
| <input type="checkbox"/> Pool | Width (ft): | Length (ft): | Avg. Depth (ft): | Max. Depth (ft): |
| <input checked="" type="checkbox"/> Flow | Present? | <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No | Estimated (ft ³ /sec): | |

Substrate*: (These values should add up to 100%.)

| | | | | | | | |
|----------|----------|-----------|--------|-----------|--------|------------|-----------|
| % Cobble | % Gravel | <u>60</u> | % Sand | <u>40</u> | % Silt | % Mud/Clay | % Bedrock |
|----------|----------|-----------|--------|-----------|--------|------------|-----------|

Aquatic Vegetation*: (note amount of vegetation or algal growth at the assessment site)

| |
|---------------------------------------------------------------------------------------|
| <u>Hydric Plants in channel & along banks.</u> <u>Hydric Trees along banks</u> |
|---------------------------------------------------------------------------------------|

Water Characteristics*: (Mark all that apply.)

| | | | | | |
|------------------|-------------------------------------------|---------------------------------|-----------------------------------------|------------------------------------------|---------------------------------|
| Odor: | <input type="checkbox"/> Sewage | <input type="checkbox"/> Musky | <input type="checkbox"/> Chemical | <input checked="" type="checkbox"/> None | <input type="checkbox"/> Other: |
| Color: | <input checked="" type="checkbox"/> Clear | <input type="checkbox"/> Green | <input type="checkbox"/> Gray | <input type="checkbox"/> Milky | <input type="checkbox"/> Other: |
| Bottom Deposit: | <input type="checkbox"/> Sludge | <input type="checkbox"/> Solids | <input type="checkbox"/> Fine sediments | <input checked="" type="checkbox"/> None | <input type="checkbox"/> Other: |
| Surface Deposit: | <input type="checkbox"/> Oil | <input type="checkbox"/> Scum | <input type="checkbox"/> Foam | <input checked="" type="checkbox"/> None | <input type="checkbox"/> Other: |

Comments: Please attach additional comments (including information from interviews) to this form.

Storm Drain outlet in creek, tad poles & minnows

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I, the undersigned, hereby affirm to the best of my knowledge, that all information reported on this UAA datasheet is true and accurate.

Signed: A. Marshaus Date: 7-7-05

Organization: SWCP Position: SSI

0652_01_US



0652_01_DS



Field Data Sheets for Recreational Use Stream Surveys

Data Sheet B - Site Characterization

(A separate data sheet must be completed for each site)

| | | |
|---------------------------------------------|-----------------------------------------------------------|--------|
| Missouri WBID #: 0652-02 | Site Location Description: | |
| Site GPS Coordinates: 40.49827N/928404 | W Sandy Creek | |
| Date & Time: 7-6-05 @ 9:57 | Facility Name: | |
| Personnel: DD, AM | Permit Number: | |
| Current Weather Conditions: Hot, Sunny, Dry | Weather Conditions for Past 7 days: Some Rain, Hot, Humid | |
| Photo Ids: Upstream: 065202 | Downstream: 065202 | Other: |

Uses Observed*:

| | | | | |
|---------------------------------------|--------------------------------------|---------------------------------------|-------------------------------------------------------|---------------------------------------|
| <input type="checkbox"/> Swimming | <input type="checkbox"/> Skin diving | <input type="checkbox"/> SCUBA diving | <input type="checkbox"/> Tubing | <input type="checkbox"/> Water skiing |
| <input type="checkbox"/> Wind surfing | <input type="checkbox"/> Kayaking | <input type="checkbox"/> Boating | <input type="checkbox"/> Wading | <input type="checkbox"/> Rafting |
| <input type="checkbox"/> Hunting | <input type="checkbox"/> Trapping | <input type="checkbox"/> Fishing | <input checked="" type="checkbox"/> None of the above | <input type="checkbox"/> Other: |

Describe: (include number of individuals recreating, frequency of use, photo-documentation of evidence of recreational uses, etc.)

Surrounding Conditions*: (Mark all that promote or impede recreational uses. Attach photos of evidence or unusual items of interest.)

| | | | | |
|--------------------------------------------|-------------------------------------------|-------------------------------------------------|--------------------------------------------------------|-----------------------------------------|
| <input type="checkbox"/> City/county parks | <input type="checkbox"/> Playgrounds | <input type="checkbox"/> MDC conservation lands | <input type="checkbox"/> Urban areas | <input type="checkbox"/> Campgrounds |
| <input type="checkbox"/> Boating accesses | <input type="checkbox"/> State parks | <input type="checkbox"/> National forests | <input type="checkbox"/> Nature trails | <input type="checkbox"/> Stairs/walkway |
| <input type="checkbox"/> No trespass sign | <input checked="" type="checkbox"/> Fence | <input type="checkbox"/> Steep slopes | <input checked="" type="checkbox"/> Other: Cattle Gate | |

Evidence of Human Use*:

| | | | | |
|--------------------------------------------------|--------------------------------------------|----------------------------------------|--------------------------------------------------------|------------------------------------------|
| <input checked="" type="checkbox"/> Roads Hwy YY | <input type="checkbox"/> Foot paths/prints | <input type="checkbox"/> Dock/platform | <input checked="" type="checkbox"/> Livestock Watering | <input type="checkbox"/> RV / ATV Tracks |
| <input type="checkbox"/> Rope swings | <input type="checkbox"/> Camping Sites | <input type="checkbox"/> Fire pit/ring | <input type="checkbox"/> NPDES Discharge | <input type="checkbox"/> Fishing Tackle |
| <input type="checkbox"/> Other: | | | | |

Site Locations Map(s): Attach a map of entire segment with assessment sites clearly labeled. Mark any other items that may be of interest. (Include photographs)

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Field Data Sheets for Recreational Use Stream Surveys

Data Sheet B - Site Characterization

Page Two - WBID # 0652-02

Stream Morphology:

Upstream View Physical Dimensions:

| | | | | |
|------------------------------------------|-----------------------|---------------------------------------------------------------------|-----------------------------------|-----------------------------|
| <input type="checkbox"/> Riffle | Width (ft): | Length (ft): | Avg. Depth (ft): | Max. Depth (ft): |
| <input type="checkbox"/> Run | Width (ft): | Length (ft): | Avg. Depth (ft): | Max. Depth (ft): |
| <input checked="" type="checkbox"/> Pool | Width (ft): <u>25</u> | Length (ft): <u>50</u> | Avg. Depth (ft): <u>0.5</u> | Max. Depth (ft): <u>1.5</u> |
| <input checked="" type="checkbox"/> Flow | Present? | <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No | Estimated (ft ³ /sec): | |

Downstream View Physical Dimensions:

| | | | | |
|------------------------------------------|-----------------------|---------------------------------------------------------------------|-----------------------------------|-----------------------------|
| <input type="checkbox"/> Riffle | Width (ft): | Length (ft): | Avg. Depth (ft): | Max. Depth (ft): |
| <input type="checkbox"/> Run | Width (ft): | Length (ft): | Avg. Depth (ft): | Max. Depth (ft): |
| <input checked="" type="checkbox"/> Pool | Width (ft): <u>25</u> | Length (ft): <u>65</u> | Avg. Depth (ft): <u>0.5</u> | Max. Depth (ft): <u>1.5</u> |
| <input checked="" type="checkbox"/> Flow | Present? | <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No | Estimated (ft ³ /sec): | |

Substrate*: (These values should add up to 100%.)

| | | | | | |
|----------|----------|------------------|------------------|------------|-----------|
| % Cobble | % Gravel | <u>50</u> % Sand | <u>50</u> % Silt | % Mud/Clay | % Bedrock |
|----------|----------|------------------|------------------|------------|-----------|

Aquatic Vegetation*: (note amount of vegetation or algal growth at the assessment site)

| | |
|-----------------------------------------------|-----------------------|
| Hydric Vegetation along banks (v. thick/high) | < 1% algae in channel |
| Hydric Trees | along banks |

Water Characteristics*: (Mark all that apply.)

| | | | | | |
|------------------|-------------------------------------------|---------------------------------|-----------------------------------------|------------------------------------------|---------------------------------|
| Odor: | <input type="checkbox"/> Sewage | <input type="checkbox"/> Musky | <input type="checkbox"/> Chemical | <input checked="" type="checkbox"/> None | <input type="checkbox"/> Other: |
| Color: | <input checked="" type="checkbox"/> Clear | <input type="checkbox"/> Green | <input type="checkbox"/> Gray | <input type="checkbox"/> Milky | <input type="checkbox"/> Other: |
| Bottom Deposit: | <input type="checkbox"/> Sludge | <input type="checkbox"/> Solids | <input type="checkbox"/> Fine sediments | <input checked="" type="checkbox"/> None | <input type="checkbox"/> Other: |
| Surface Deposit: | <input type="checkbox"/> Oil | <input type="checkbox"/> Scum | <input type="checkbox"/> Foam | <input checked="" type="checkbox"/> None | <input type="checkbox"/> Other: |

Comments: Please attach additional comments (including information from interviews) to this form.

minnows present

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I, the undersigned, hereby affirm to the best of my knowledge, that all information reported on this UAA datasheet is true and accurate.

Signed: A. Marshaw Date: 7-7-05

Organization: SWCP Position: SSI

0652_02_US



0652_02_DS



Field Data Sheets for Recreational Use Stream Surveys

Data Sheet B - Site Characterization

(A separate data sheet must be completed for each site)

4050437 2 18.9
9282041

| | |
|----------------------------------------------|-----------------------------------------------------------|
| Missouri WBID #: 0652-03 | Site Location Description: Sandy Creek |
| Site GPS Coordinates: 40.50 | |
| Date & Time: 7-6-05 @ 10:40 | Facility Name: |
| Personnel: DD. AM | Permit Number: |
| Current Weather Conditions: Mid 80's hot mid | Weather Conditions for Past 7 days: Some Rain 80's - 90's |
| Photo Ids: Upstream: 0652U3 | Downstream: 0652D3 Other: |

Uses Observed*:

| | | | | |
|---------------------------------------|--------------------------------------|---------------------------------------|-------------------------------------------------------|---------------------------------------|
| <input type="checkbox"/> Swimming | <input type="checkbox"/> Skin diving | <input type="checkbox"/> SCUBA diving | <input type="checkbox"/> Tubing | <input type="checkbox"/> Water skiing |
| <input type="checkbox"/> Wind surfing | <input type="checkbox"/> Kayaking | <input type="checkbox"/> Boating | <input type="checkbox"/> Wading | <input type="checkbox"/> Rafting |
| <input type="checkbox"/> Hunting | <input type="checkbox"/> Trapping | <input type="checkbox"/> Fishing | <input checked="" type="checkbox"/> None of the above | <input type="checkbox"/> Other: |

Describe: (include number of individuals recreating, frequency of use, photo-documentation of evidence of recreational uses, etc.)

Surrounding Conditions*: (Mark all that promote or impede recreational uses. Attach photos of evidence or unusual items of interest.)

| | | | | |
|--------------------------------------------|--------------------------------------|-------------------------------------------------|----------------------------------------|-----------------------------------------|
| <input type="checkbox"/> City/county parks | <input type="checkbox"/> Playgrounds | <input type="checkbox"/> MDC conservation lands | <input type="checkbox"/> Urban areas | <input type="checkbox"/> Campgrounds |
| <input type="checkbox"/> Boating accesses | <input type="checkbox"/> State parks | <input type="checkbox"/> National forests | <input type="checkbox"/> Nature trails | <input type="checkbox"/> Stairs/walkway |
| <input type="checkbox"/> No trespass sign | <input type="checkbox"/> Fence | <input type="checkbox"/> Steep slopes | <input type="checkbox"/> Other: | |

Evidence of Human Use*:

| | | | | |
|---------------------------------------------------------------|--------------------------------------------|----------------------------------------|---------------------------------------------|------------------------------------------|
| <input type="checkbox"/> Roads | <input type="checkbox"/> Foot paths/prints | <input type="checkbox"/> Dock/platform | <input type="checkbox"/> Livestock Watering | <input type="checkbox"/> RV / ATV Tracks |
| <input type="checkbox"/> Rope swings | <input type="checkbox"/> Camping Sites | <input type="checkbox"/> Fire pit/ring | <input type="checkbox"/> NPDES Discharge | <input type="checkbox"/> Fishing Tackle |
| <input checked="" type="checkbox"/> Other: Wild life Watering | | | | |

Site Locations Map(s): Attach a map of entire segment with assessment sites clearly labeled. Mark any other items that may be of interest. (Include photographs)

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Field Data Sheets for Recreational Use Stream Surveys

Data Sheet B - Site Characterization

Page Two - WBID #0652:- 02

Stream Morphology:

Upstream View Physical Dimensions: DRY WEATHER

| | | | | |
|------------------------------------------|-------------|---------------------------------------------------------------------|-----------------------------------|------------------|
| <input type="checkbox"/> Riffle | Width (ft): | Length (ft): | Avg. Depth (ft): | Max. Depth (ft): |
| <input type="checkbox"/> Run | Width (ft): | Length (ft): | Avg. Depth (ft): | Max. Depth (ft): |
| <input type="checkbox"/> Pool | Width (ft): | Length (ft): | Avg. Depth (ft): | Max. Depth (ft): |
| <input checked="" type="checkbox"/> Flow | Present? | <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No | Estimated (ft ³ /sec): | |

Downstream View Physical Dimensions: DRY WEATHER

| | | | | |
|------------------------------------------|-------------|---------------------------------------------------------------------|-----------------------------------|------------------|
| <input type="checkbox"/> Riffle | Width (ft): | Length (ft): | Avg. Depth (ft): | Max. Depth (ft): |
| <input type="checkbox"/> Run | Width (ft): | Length (ft): | Avg. Depth (ft): | Max. Depth (ft): |
| <input type="checkbox"/> Pool | Width (ft): | Length (ft): | Avg. Depth (ft): | Max. Depth (ft): |
| <input checked="" type="checkbox"/> Flow | Present? | <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No | Estimated (ft ³ /sec): | |

Substrate*: (These values should add up to 100%.)

| | | | | | | | |
|----------|----------|----|--------|----|--------|------------|-----------|
| % Cobble | % Gravel | 75 | % Sand | 25 | % Silt | % Mud/Clay | % Bedrock |
|----------|----------|----|--------|----|--------|------------|-----------|

Aquatic Vegetation*: (note amount of vegetation or algal growth at the assessment site)

| |
|------------------------------------------------|
| Hydric Plants & TREES along banks & in channel |
|------------------------------------------------|

Water Characteristics*: (Mark all that apply.)

| | | | | | |
|------------------|---------------------------------|---------------------------------|-----------------------------------------|------------------------------------------|------------------------------------------------|
| Odor: | <input type="checkbox"/> Sewage | <input type="checkbox"/> Musky | <input type="checkbox"/> Chemical | <input checked="" type="checkbox"/> None | <input type="checkbox"/> Other: |
| Color: | <input type="checkbox"/> Clear | <input type="checkbox"/> Green | <input type="checkbox"/> Gray | <input type="checkbox"/> Milky | <input checked="" type="checkbox"/> Other: DRY |
| Bottom Deposit: | <input type="checkbox"/> Sludge | <input type="checkbox"/> Solids | <input type="checkbox"/> Fine sediments | <input checked="" type="checkbox"/> None | <input type="checkbox"/> Other: |
| Surface Deposit: | <input type="checkbox"/> Oil | <input type="checkbox"/> Scum | <input type="checkbox"/> Foam | <input checked="" type="checkbox"/> None | <input type="checkbox"/> Other: |

Comments: Please attach additional comments (including information from interviews) to this form.

channel was moist & v. sandy may be intermittent/losing stream
stream may have lost water @ some point

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I, the undersigned, hereby affirm to the best of my knowledge, that all information reported on this UAA datasheet is true and accurate.

Signed: B. Marshaw Date: 7-7-05

Organization: SWCP Position: SSI

0652_03_US



0652_03_DS

